

REMARKS

In the Office Action, claims 25-50 were rejected. By the present response, claims 25, 29 and 46 are amended. Upon entry of the amendments, claims 25-50 will be pending in the present patent application. Reconsideration and allowance of all pending claims are requested

Objection to the specification

The Examiner objected to the specification because paragraph 46 was incomplete. Appropriate correction has been made. Withdrawal of the objection is requested.

Rejections Under 35 U.S.C. §112

Claims 25-50 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the enablement requirement. Applicant respectfully traverses the rejection. Essentially, the function of transferring the contents of the capillary in a substantial plug flow is to allow sufficient residence time for the fluid medium inside the capillary to allow the chemical species to permeate through capillary walls as described in the application in paragraphs 21, 22, and 26. However, to expedite prosecution and to more clearly recite the claimed subject matter, independent claims 25, 29 and 46 have been amended by the present response.

Amended claims 25 recites *inter alia* delivering a fluid medium into a space inside a capillary and allowing the fluid medium to reside in the capillary without being removed. As described in the application, a chemical species is allowed to permeate through the wall of the capillary. Then, the capillary content (fluid medium) is transferred to the sensing element of the detector. A magnitude of the characteristic of the chemical species is detected and measured and related to an amount of the chemical species. Further, the time of detection of the characteristic is measured and related to location of chemical species.

Amended claims 29 and 46 recite *inter alia* delivering a fluid medium including a reagent into a space inside a capillary and allowing the fluid medium to reside in the capillary without being removed. A chemical species is allowed to permeate through the wall of the capillary and allowed to react with the reagent in the fluid medium to yield an optically detectable interaction product. After reaction, the capillary content (fluid medium) is transferred to the sensing element of the detector. A magnitude of an optical signal resulting from the presence of the optically detectable interaction product is detected and measured and related to an amount of the chemical species. Further, the detection time at of the optical signal is measured and related to location of chemical species.


It is clear from paragraphs 22 and 26 of the application that the present technique allows a sufficient residence time for the fluid medium in the capillary without removing the fluid medium as recited in amended claims 25, 29 and 46. The residence time is provided to allow sufficient time for a chemical species to permeate through the walls of the capillary and to react with a reagent (if present) in the fluid medium before transferring to the sensing element of the detector. Consequently, amended claims 25, 29 and 46 and their dependent claims 26-28, 30-45, and 47-50 are believed to be in condition for allowance for the reasons summarized above. Consideration and allowance of the new claims are requested.

Conclusion

In view of the remarks and amendments set forth above, Applicants respectfully request allowance of the pending claims. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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